EFEK ANALGESIK LIQUID SMOKE TEMPURUNG KELAPA (Cocos nucifera L) PADA MENCIT (Mus Musculus) YANG DIINDUKSI ASAM ASETAT 0,6%

THE ANALGESIC EFFECT LIQUID SMOKE OF COCONUT SHELL (Cocos nucifera L) IN MUS MUSCULUS INDUCED BY ACETIC ACID 0,6%

ABSTRACT

Background: One mechanism of drug can be used to eliminate pain is to inhibit activity of conversing arachidonic acid into prostaglandin, which can cause pain. The chemical composition of coconut shell are cellulose, pentosan, lignin, solvent extraction, uronat anhydrous, nitrogen, and water. One active ingredient in coconut shell is phenyl propanoid which consisting lignin structure and guaiacol. Phenyl propanoid and guaicol are phenolic compounds that can be used as an antioxidant, antiseptic, anti-inflammatory, anesthetic and analgesic. Liquid smoke of coconut (Cocos nucifera L) contains phenolic compound which believed to bind a component that conversing arachidonic acid into prostaglandin. Purpose: To prove liquid smoke of coconut shell (Cocos nucifera L) has analgesic effect. Method: The analgesic effect is determined by its peripheral pharmacological actions using acetic acid-induced writhing reflex on mice. The type of this research is the experimental laboratories research, conducted on 2-3 month age and 20-30 grams weight male Mus musculus. The Mus musculus divided into 4 groups, each group consist of 7. Control group was given 0.01 ml/weight aquades per-oral and after 30 minutes, 10 ml/weight acetic acid 0,6% delivered via intraperitoneal injection. Other groups were given liquid smoke of coconut shell (Cocos nucifera L) by the concentrations of 100%, 50% and 25%. The recording of writhing reflex was done every 5 minutes during 30 minutes. Result: There are differences of writhing reflexes which given liquid smoke of coconut shell with significancy 0.000 (p < 0.05) by the concentration of 100%, 50% and 25%. Conclusion: Liquid smoke of coconut shell (Cocos nucifera L) has analgesic effect on Mus musculus which induced by acetic acid 0,6%.

Keywords: analgesic effect, liquid smoke of coconut shell, acetic acid.